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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/960,694 | 09/24/2001 | Kenichi Kotoku | 862.C2453 | 5254 |

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NEW YORK, NY 10112

EXAMINER

HASSANZADEH, PARVIZ

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1763

DATE MAILED: 07/07/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/960,694

Applicant(s)

KOTOKU, KENICHI

Examiner

Parviz Hassanzadeh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 13-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group I, claims 1-12, in Paper No. 7 is acknowledged. The traversal is on the ground(s) that all claims can be searched simultaneously. This is not found persuasive because search required for the non-elected groups are not co-extensive with the search required for group I as shown by their different classification.

The requirement is still deemed proper and is therefore made FINAL.

Claims 13-16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Groups, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 7.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Takahashi (US Patent No. 5,526,093).

Takahashi teaches an exposure apparatus (Fig. 1) for sequentially performing exposure of device pattern provided in a pattern effective area of a photo-mask on to shot areas of a wafer, the apparatus comprising:

an illumination unit including optical members 2, 3, 4, and a light source 1 for collectively illuminating the entire pattern effective area of the photo-mask contained within the illumination range with exposure light;

a reticle 7 held on a movable reticle stage 44 (*mask stage*) wherein the reticle 7 having a device pattern to be projected onto a wafer 9 through a projection optical system 8, wherein the mask stage moves the photo-mask in X-direction;

a wafer holder 41 mounted on a wafer stage 42 (*wafer stage*) supporting a wafer 9, wherein the wafer stage moves in both x and Y directions; and

a controller 43 (*control means*) controlling the sequential movement of the reticle stage 44 in the X-direction and wafer stage 42 in the X-direction and the Y-direction and in synchronized with the reticle stage (column 3, lines 10-67).

The apparatus as taught by Takahashi is inherently capable of being used to perform exposure under the conditions cited in claims 5, 6 and 12.

Response to Arguments

Applicant's arguments filed 6/4/03 have been fully considered but they are not persuasive.

Applicant asserts Takashi does not teach "illuminating the entire pattern area of the photo-mask contained within the illumination range with exposure light and, after containing at least one shot area of the wafer within the projection range to get device patterns provided in the pattern effective area of the photo-mask onto the one shot area of the wafer, synchronizing and

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controlling the movement of the mask stage and the wafer stage while keeping the entire pattern effective of the photo-mask contained within the illumination rage."

The Examiner argues that the apparatus of Takashi comprises all the structural limitations of the claimed apparatus including a reticle 7 held on a movable reticle stage 44 (*mask stage*) wherein the reticle 7 having a device pattern to be projected onto a wafer 9 through a projection optical system 8, wherein the mask stage moves the photo-mask in X-direction; and wherein a controller 43 (*control means*) controlling the sequential movement of the reticle stage 44 in the X-direction and wafer stage 42 in the X-direction and the Y-direction and in synchronized with the reticle stage (column 3, lines 10-67). Furthermore, the device pattern to be projected onto a wafer is considered an intended used of the apparatus and does not impart patentability to the claim. *In re Young*, 75 F.2d 966, 25 USPQ 69 (CCPA 1935) (as restated in *In re Otto*, 312 F.2d 937, 136 USPQ 458, 459 (CCPA 1963)).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ozawa (US Patent No. 6,154,270) teach an exposure apparatus including a controller for controlling the mask stage, wafer stage and laser system; and

Nishi et al (US Patent No. 5,883,704) teach an exposure apparatus including a controller for controlling the mask stage, wafer stage and laser system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Parviz Hassanzadeh whose telephone number is (703)308-2050. The examiner can normally be reached on Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Mills can be reached on (703)308-1633. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9310 for regular communications and (703)872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

P. Hassanzadeh
Parviz Hassanzadeh
Primary Examiner
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July 2, 2003